ABSTRACT

A chelate-forming filter having both the capability of capturing (removing), as a chelate, metals, metalloids or compounds thereof and the capability of removing insoluble impurities is disclosed, which is prepared by introducing a chelate-forming functional group represented by the following general formula (1) or (3) into a fiber molecule of a filter material made of a natural fiber, a regenerated fiber, or a synthetic fiber. A process for producing the same, and a process for the purification of a liquid using the filter are also disclosed.

[wherein, G represents a chain sugar alcohol residue or a polyhydric alcohol residue, and R represents a hydrogen atom, a (lower) alkyl group, or -G (wherein G has the same meaning as defined above and may be a group identical to or different from the aforementioned G)]

$$\begin{array}{c}
H \circ \\
O \\
R^{2} \\
N \\
R^{3} \\
\end{array}$$

$$\begin{array}{c}
C \circ O \circ H \\
N \\
R^{3} \\
\end{array}$$

$$\begin{array}{c}
C \circ O \circ H \\
N \\
R^{3} \\
\end{array}$$

(wherein each of R^1 , R^2 , and R^3 is a lower alkylene group, and n denotes an integer of 1 to 4).